

Reading the two assigned texts, developing presentations, writing the research paper, and actually participating in drag racing (including documentation and prediction) activity students develop in their abilities to locate, critically read, and evaluate information to solve problems

2. Critically evaluate the ideas of others

Students evaluate their peers' presentations on the merits of both the content and the actual effectiveness of the presentation.

3. Apply knowledge and skills within and across the fundamental ways of knowing (natural sciences, social and behavioral sciences, arts and humanities, mathematics and history)

Through the reflections, students demonstrate their understanding of various ways of knowing. In the experiential learning opportunity, students are encouraged to engage in science through documentation and prediction, and in mathematics. In the presentation and final paper students demonstrate their abilities to integrate ways of knowing including history, natural sciences, social and behavioral sciences, as they demonstrate an understanding of ethics and social responsibility.

4. Demonstrate an appreciation of human expression through literature and fine and performing arts

This course makes no formalized attempt to address this objective. This objective is listed here to provide a reference to students of those foundational studies objectives in their program of study.

5. Demonstrate the skills for effective citizenship and stewardship

By completing the final research paper with a topic of green motorsports students express their understanding of the movement to positively impact their environment.

6. Demonstrate an understanding of diverse cultures within and across societies

While it is hoped that the presentations and final papers would demonstrate the diverse cultures of various forms of motorsports, it is not an explicit directive of the assignments.

7. Demonstrate the skills to place their current and local experience in a global, cultural, and historical context

While not explicit, motorsports is global by its very nature. Thus, each reflection, the presentation, and the research paper are all opportunities for students to explore and understand their experience in a global context.

8. Demonstrate an understanding of the ethical implications of decisions and actions

The final research paper is aimed at green motorsports. Thus, the students will demonstrate through their writing and research the ethical implications of going green in motorsports.

9. Apply principles of physical and emotional health to wellness

This course makes no formalized attempt to address this objective. This objective is listed here to provide a reference to students of those foundational studies objectives in their program of study.

10. Express themselves effectively, professionally, and persuasively both orally and in writing

The presentation includes a voice over audio portion that encourages the practice of oral expression. The final research paper encourages students to write effectively and professionally.

VI. Skill and Applied Learning Objectives for Upper Division Integrative Electives (S&ALO)

The following list of learning objectives is required to be imbedded in all courses within the foundational studies program, and includes specific objectives for this area.

1. Explicitly demonstrate how the curriculum will develop critical thinking skills.

Each reflection paper requires students to think critically regarding different aspects of motorsports and their affects on our society. The final research paper draws upon the students' abilities to critically assess how motorsports is answering the call of tomorrow by developing "green" solutions.

2. Explicitly demonstrate how the curriculum will develop information literacy skills.

The presentation requires students to develop a PowerPoint presentation with audio. The presentation and final research paper requires students to demonstrate and develop information literacy skills.

3. Include a graded writing component, which whenever possible is developmental.

The reflection papers, presentation, and final research paper are all graded writing components.

- 4. Must incorporate opportunities for students to critically read and analyze sophisticated, complex text, and to write intensively.**

The text *The Culture and Technology of Drag Racing, 1950-2000* (Johns Hopkins Studies in the History of Technology) is a complex text integrating history, cultural diversity, socio-economic issues around the context of drag racing. Students use the lessons they learn from the text and ensuing classroom discussions to develop their analysis and presentation of another form of motorsports.

- 5. Must include assignments that apply information from within and across various "ways of knowing".**

The two texts used in the course provide a foundation of learning from multiple ways of knowing. The reflection papers, presentation project, and final paper allow the student to demonstrate their learning.

VII. Foundational Studies Upper Division Integrative Electives Learning Objectives (FS:UDIE)

The following learning objectives are required for courses, such as this one, which fulfill the mathematics area within the category for mathematics or quantitative literacy. It should be noted that only one course from the mathematics or quantitative literacy category is required in the foundational studies program.

- 1. Integrate multiple ways of knowing in a thematic approach to a particular topic or issue**

This course integrates the ways of knowing of history, science, mathematics, ethics and social responsibility, social and behavioral science in a survey of motorsports that looks at various segments of motorsports and drag racing in particular.

- 2. Engage in a project or conduct research that makes use of multiple ways of know to a address a particular topic or issue**

The presentation on their favorite form of motorsports explicitly addresses the historical and social and behavioral science (economic and social implications). The final research paper on green motorsports encompasses multiple ways of knowing including historical, natural science, social and behavioral science.

- 3. Analyze and write at an advanced level**

The research paper will allow students to analyze and write at an advanced level

VIII. Course Objectives:

In addition to those objectives more specific to the Foundational Studies Program which have already been identified, upon completion of this course, the student will be able to

- Understand several different types of motor racing
- Discuss history, economic, and social aspects of motor racing
- Identify the most active forms of motor racing in Indiana

IX. Course Assignments:

a. Lessons

PowerPoint presentations and or lectures covering drag racing, road racing, air racing, hydroplane racing, land speed, and others, one each session, provide an overview of the impact each has on society. These lessons are designed to provide students with insight regarding how motorsports has changed throughout its relatively brief history and how it continues as a leader in answering the technological, economic, ethical, and even cultural issues of our society.

b. Reading *How to Drag Race*

This “how to” book explains the drag racing at the grassroots level. This current day text helps students understand the simplicity and complexity of competition. Once completed, this text serves as foundational knowledge for the experiential learning activity.

- The science of drag racing is explored by demonstrating meticulous methods of documenting performance measures and then using collected data to predict performance.
- The mathematics involved in drag racing is revealed and explored. Timing system operation is explored. Margin of victories are often measured by ten thousandths of seconds and calculated to mere inches.
- Three quizzes of approximately ten questions ensure students are reading and understanding important concepts of drag racing.

c. Reading **High Performance : *The Culture and Technology of Drag Racing, 1950-2000 (Johns Hopkins Studies in the History of Technology)***

This book chronicles the history of drag racing from its inception in 1950 to the turn of the century. By reading this text students will understand drag racing from the historical and the social and behavioral science ways of knowing.

- Lessons relating to the text help students understand the evolution of a sport from being a reckless expression of youth to the science of

the next technological innovation changing the world while entertaining millions of fans while traversing 1000 feet in less than 4 seconds.

- Four quizzes of approximately ten questions each will assess the students' comprehension of the text.

d. Viewing *Slingshot*

This 30 minute video is available to students through the blackboard management system. This video documents a major economic shift in drag racing from participant to spectator.

- A reflection style essay paper should answer the question “how did the era of the slingshot dragster serve to help drag racing evolve from primarily a participant sport to more of a grandstand spectator event?”
- The essay should be more than 600 words

e. Experiential Learning Opportunity – ELO Reflection

Drag racing is a motorsport that everyone can participate in with relative ease. Grassroots racing developed out of a desire for competition among young adults. By partnering with the local drag strip, students will be able to experience drag racing for themselves. Crossroads Dragway has agreed to allow students a complimentary opportunity on one of the Friday Night Fun Nights to experience drag racing from the driver's seat or from a spectator's point of view.

- Crossroads Dragway will coordinate a tour for students of this course.
- Students may elect to participate in the Friday Night Fun Night by racing their own street vehicle.
- Students may opt to be a spectator in lieu of actually racing.
- *Under no circumstance will the grade earned in this experiential learning opportunity be impacted by on-track performance.*
- In fulfillment of this assignment students will write a reflection of the experience connecting the *How to Drag Race* text, the tour, and the experience to reflect their learning of motorsports. The paper should be 800-900 words

Those students not able to attend the local drag racing facility may attend a drag racing facility near their residence. This drag racing experience is an important aspect of the course completing an immersion in the sport.

f. Homework:

Each student is expected to complete the required reading as assigned, in a timely manner.

Quizzes will be posted periodically to Blackboard/Courseinfo. Students are expected to log onto blackboard by going to <http://blackboard.indstate.edu> . The login for Blackboard is the same as your MyPortal login.

g. Presentation:

Each student will be required to create a PowerPoint presentation interpreting one form of racing. This PowerPoint must include a voice over narration.

The presentation must explicitly address historical and social and behavioral science (economic and social implications) issues of the sport. The current state of the sport should also be addressed including the technology. Questions to be answered include the current trends, rules, regulations, the type and number of spectators, and the cost to compete. The impact on society should also be included. Fellow classmates will provide constructive criticism by reviewing the PowerPoint and filling out a grading rubric.

h. Writing Project:

A significant writing assignment (paper) will be due near the end of the course. *The topic must be about motorsports.* The student is expected to investigate an important aspect of or pertaining to motorsports. The research paper should include at least three “ways-of-knowing” such as historical implications, economic issues, social issues, cultural perspectives and even the science behind the technology being explored. People, places, events, sanctioning bodies or the specific technology may serve as the focus of the paper. Students should provide details as to the significance of the contribution and the subsequent impacts on racing. The assignment should reflect more than one person’s perspective. Written in APA manuscript style, this paper is expected to be a minimum of 2000 words in the body and reference at least six different sources, with no more than three Internet only sources.

A draft of the paper may be submitted by the due date listed in the schedule. A cursory review of the paper by the instructor will provide guidance toward a successful final paper submission. Submitting a draft paper on time will result in extra credit. A draft paper submitted after the due date will not receive extra credit and will not be reviewed.

i. Final Exam

A comprehensive final short answer/essay/multiple-choice exam will be given. Reading assignments, class lectures, field trips, and guest presentations are likely to be included in the final exam.

j. Professional activities:

You are encouraged to associate yourself with student groups such as SMA (Sycamore Motorsports Association), SAE (Society of Automotive Engineers),

and TSR (Team Sycamore Racing), etc. These organizations sponsor motorsports programs and activities on and off campus that will be of benefit to you in your educational and professional development

X. Course Evaluation Methods:

The student’s final grade for this course will be based upon the total points accrued in the following areas.

Weekly assignments will be made and the presentations may or may not always coincide with the reading assignments. The reading schedule is planned such that all pertinent reading material can be completed by the end of the course.

Reflection Slingshot	= 050 points
Reflection Racing Event	= 060 points
Presentation	= 120 points
Research Paper	= 200 points
Class Participation	= 050 points
Quizzes/Other	= 200 points
Final exam	= <u>100 points</u>
	780 points total (approximate)

<u>Grading Scale</u>	
A	92-100%
A-	90-92%
B+	88-90%
B	82-88%
B-	80-82%
C+	78-80%
C	72-78%
C-	70-72%
D+	68-70%
D	62-68%
D-	60-62%
F	0-60%

XI. Course Materials:

Required

Textbooks:

How to Drag Race, Kevin McKenna
ISBN: 9781932494471

High Performance: The Culture and Technology of Drag Racing, 1950-2000 (Johns Hopkins Studies in the History of Technology), Robert C. Post, ISBN: 0801866642

Recommended

Reference Materials: *Publication Manual of the American Psychological Association, 5th Ed*
ISBN: 1-55798-810-2

Software:

Access to the Internet is essential
Microsoft Word

XII. RIGHT OF REVISION:

The instructor reserves the right to amend the course syllabus. Students will be notified in advance of any changes to the syllabus.

XIII. ATTENDANCE:

Students are expected to attend (and participate in) all class sessions. The drop procedure is the student’s responsibility and the student should not expect the

instructor to do it for them. Please refer to the University Policy on attendance as published in the Student Handbook.

In this course, participation is a key element with regard to providing constructive criticism during the presentation phase. Twenty five points are available for participation. Since the class meets twice per week, you will lose 5 points for each absence. In either case, penalties for absences will continue to accrue beyond the 25 points awarded for participation. If the instructor cancels the class, no points will be lost.

XIV. ACADEMIC HONESTY STATEMENT:

The University is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

*Cheating on papers, tests or other academic works is a violation of University rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior. Such violations **will result in grade reduction** and may lead to expulsion from the class.*

XV. AMERICANS WITH DISABILITIES ACT:

Indiana State University seeks to provide effective services and accommodation for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, you are to register with Disability Support Services at the beginning of the semester. Contact the Director of Student Support Services, Gillum Hall, room 202A, 237-2301. The director will ensure that you receive all the additional help that ISU offers. If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.

XVI. LAPTOP USAGE

When this class is taught face-to-face:

Laptop Not Required for Course: Usage Permitted: While there will be no assignments or examinations for which the laptop will be used, your use of a laptop is generally permitted as long as such usage remains within the bounds of the Code of Student Conduct and it conforms to the provisions of its use as laid out in this syllabus. There may be occasions where laptop usage is forbidden and if that occurs, failure to comply with this direction will be viewed as a violation of the Code of Student Conduct.

AET 330 Weekly Schedule

Fall 2013

Week	Date Due	Topic	Complete Assigned Reading	Due
1	26-Aug	Introduction	Get your books	
2	02-Sep	Drag Racing Overview		Choose Presentation Topic
3	09-Sep	Drag Racing Pro Classes	<i>How to Drag Race:</i> Chapters 1-3	Quiz 1
4	16-Sep	Drag Racing Sportsman	<i>How to Drag Race:</i> Chapters 4-7	Quiz 2
5	23-Sep	Drag Racing ET Brackets	<i>How to Drag Race:</i> Chapters 8-11 Watch "Slingshot" Video	Quiz 3 & "Slingshot" Video Reflection
6	30-Sep	In the Beginning	<i>High Performance:</i> Intro-Ch. 4	Quiz 4
7	07-Oct	History of Drag Racing	<i>High Performance:</i> Chapters 5-7	Quiz 5
8	14-Oct			Presentation Due
9	21-Oct	Current Issues of Drag Racing	Begin Review of Presentations	Draft Research Paper
10	28-Oct		Complete Presentation Reviews	Turn in Reviews
11	04-Nov			ELO Reflection
12	11-Nov			Research Paper Due
13	18-Nov	History of Drag Racing II	<i>High Performance:</i> Chapters 8-10	Quiz 6
14	02-Dec	History of Drag Racing III	<i>High Performance:</i> Chapters 11-14	Quiz 7
15	09-Dec	Review	Review	
16	12-Dec	<u>BY THURSDAY@ 4:00 PM</u> Final Exam	Absolutely no late work accepted after 4:00 PM	Final Exam